



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

MEMORANDUM

DATE: June 2, 1986
TO: File
FROM: Ruth Ann Jacquette *Raj*
SUBJECT: Illinois/R05-8603-19/IL0457
Burnham/Calumet Refining Company
ILD98497713

Calumet Refining Company has been in operation since 1916. The company started out as a refinery, but in 1953 the refining of crude oil was stopped. Currently the facility operates mainly as a terminal station. Virgin stock oils from their refinery in Shreveport, Louisiana are shipped by rail, temporarily stored at the site, and dispatched by tanker trucks to buyers throughout the midwest. A portion of the virgin stock oil is blended with additives to produce lubricant oils, which are also sold and shipped out in bulk. Additives used in this process are mainly purchased from companies such as Exxon, Chevron, and Texaco. The facility also manufactures additives, which are either sold directly to buyers or are used in the production of lubricant oils. A heavy residual fuel oil results from the blending process and is sold to another oil processor as Number 6 fuel oil. This site was originally identified by the Illinois EPA in the form of a Preliminary Assessment submitted to the U.S. EPA.

On Wednesday, May 14, 1986, FIT members performed a site inspection and interviewed Henry Banick and David Kucharsti of Calumet Refining Company. The facility does not generate any waste. All oils present at the site are either products from the manufacturing process or the virgin stock oils which are temporarily stored on the site.

EPA Region 5 Records Ctr.



298978

Virgin stock oils, additives, and lubricant oils are stored in above ground tanks. Small quantities of additives are stored in 55 gallon drums in a cement pad. Seven 250 gallon below ground tanks are used as process flow tanks. Additives are poured into these tanks, and pumped into above ground tanks to be blended with virgin stock oil.

During the facility's history no major spills have occurred. Calumet Refining Company has a Spill Prevention Plan on file with the IEPA. The western border of the site is diked to prevent runoff from entering the Grand Calumet River. The facility also has a closed sewer system. All effluent passes through a skimmer tank before entering the Metropolitan Sanitary District of Greater Chicago system.

The facility is fenced on three sides, the Grand Calumet River borders the western perimeter and acts as a natural barrier.

05B:5M



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The facility is fenced on three sides, the Grand Calumet River borders the western perimeter and acts as a natural barrier.

Again, hazardous waste is not disposed, stored, or treated at this facility, and the lack of documentation of hazardous waste quantity, type, toxicity or persistence would yield a site migration score of zero.

05B:5M



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D98497713

II. SITE NAME AND LOCATION

01 SITE NAME: (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER			
Calmet Refining Co.	141st Street and Mackinaw Ave.			
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE
Burnham	IL	60633	Cook	031
08 COORDINATES LATITUDE 41° 23' 22.0"	LONGITUDE 087° 32' 30.0"	10 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER <input type="checkbox"/> G. UNKNOWN		

III. INSPECTION INFORMATION

01 DATE OF INSPECTION 02 MONTH DAY YEAR 02 14 86	02 SITE STATUS <input checked="" type="checkbox"/> ACTIVE <input type="checkbox"/> INACTIVE	03 YEARS OF OPERATION ~1916 Present UNKNOWN BEGINNING YEAR ENDING YEAR
--	--	--

04 AGENCY PERFORMING INSPECTION (Check all that apply)

A. EPA B. EPA CONTRACTOR Ecology and Environment, Inc. C. MUNICIPAL D. MUNICIPAL CONTRACTOR
 E. STATE F. STATE CONTRACTOR G. OTHER

05 CHIEF INSPECTOR Ruth Ann Jacquette	06 TITLE Geographer	07 ORGANIZATION E+E (FIT)	08 TELEPHONE NO. (312) 663-9415
09 OTHER INSPECTORS Cindy Pugh	10 TITLE Environmental Scientist	11 ORGANIZATION E+E (FIT)	12 TELEPHONE NO. (312) 663-9415
Bill Borchardt	Geologist	E+E (FIT)	(312) 663-9415
			()
			()
			()

13 SITE REPRESENTATIVES INTERVIEWED Henry Banich	14 TITLE Plant Manager	15 ADDRESS 13921 Mackinaw Ave. Burnham, IL 60633	16 TELEPHONE NO. (312) 862-9100
David Kucharsti	Environmental Affairs Rep.	13921 Mackinaw Ave. Burnham, IL 60633	(312) 862-9100
			()
			()
			()
			()

17 ACCESS GAINED BY (Check one) <input checked="" type="checkbox"/> PERMISSION <input type="checkbox"/> WARRANT	18 TIME OF INSPECTION 9:50	19 WEATHER CONDITIONS Cold, Cloudy, 50°F
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IV. INFORMATION AVAILABLE FROM

01 CONTACT Cliff Gould	02 OF (Agency Organization) ILLinois EPA, D.L.P.C.	03 TELEPHONE NO. (312) 345-9780
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM Ruth Ann Jacquette	05 AGENCY U.S. EPA	06 ORGANIZATION E+E (FIT)
		07 TELEPHONE NO. (312) 663-9415
		08 DATE 6-12-86 MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D98497713

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)	02 WASTE QUANTITY AT SITE <small>(Measures of waste quantities must be independent.)</small>	03 WASTE CHARACTERISTICS (Check all that apply)			
<input type="checkbox"/> A SOLID <input type="checkbox"/> B POWDER, FINES <input type="checkbox"/> C SLUDGE <input type="checkbox"/> D. OTHER _____ <small>(Specify)</small>	<input type="checkbox"/> E. SLURRY <input checked="" type="checkbox"/> F. LIQUID <input type="checkbox"/> G. GAS	<input type="checkbox"/> TONS _____ <input type="checkbox"/> CUBIC YARDS _____ NO. OF DRUMS Unknown	<input type="checkbox"/> A. TOXIC <input type="checkbox"/> B. CORROSIVE <input type="checkbox"/> C. RADIOACTIVE <input type="checkbox"/> D. PERSISTENT	<input type="checkbox"/> E. SOLUBLE <input type="checkbox"/> F. INFECTIOUS <input type="checkbox"/> G. FLAMMABLE <input type="checkbox"/> H. IGNITABLE	<input type="checkbox"/> I. HIGHLY VOLATILE <input type="checkbox"/> J. EXPLOSIVE <input type="checkbox"/> K. REACTIVE <input type="checkbox"/> L. INCOMPATIBLE <input type="checkbox"/> M. NOT APPLICABLE
		NA			

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			See Comments below
SOL	SOLVENTS			
FSD	PESTICIDES			
OCOC	OTHER ORGANIC CHEMICALS			
ICOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MIES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

Calumet Refining operates as a terminal station for their refinery located in Louisiana. Virgin base stock oils are shipped by rail to the Burnham facility. A portion of the base stock is blended with additives to produce lubricating oils, which is also sold. Additives which are manufactured onsite, are either sold directly to customers or used in the production of lubricating oils. Additives are also purchased from companies such as Exxon, Chevron and Texaco. Any residue which results from this process is sold as number 6 fuel oil.

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Petroleum Lube Additives	UNK	FDS		
FDS	Virgin Stock Oils	UNK	FDS		
FDS	dictate	UNK	FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (One specific references e.g., state files, sample analysis, reports)

- Site inspection conducted by E&E(FIT) members on 4/14/86.
- Letter from D.J. Kucharski, Coordinator of Environmental Affairs, Calumet Refining Company, to Ruth Ann Jacquette, Environmental Scientist, Ecology and Environment, Inc., May 23, 1986.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

L. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D98497713

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 A. GROUNDWATER CONTAMINATION

02 OBSERVED (DATE: _____)

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 50

04 NARRATIVE DESCRIPTION

Shallow glacial drift and Silurian dolomite aquifers at 40 feet are used as a source for drinking water. These aquifers supply 13 private homes with drinking water. There is no hazardous waste stored onsite.

01 B. SURFACE WATER CONTAMINATION

02 OBSERVED (DATE: _____)

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 0

04 NARRATIVE DESCRIPTION

The Grand Calumet River is located 100 feet west of the site. The site is diked such that runoff will not enter the River. The material stored on site is not hazardous.

01 C. CONTAMINATION OF AIR

02 OBSERVED (DATE: _____)

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 0

04 NARRATIVE DESCRIPTION

There are no observed or documented threats of air contamination.

01 D. FIRE/EXPLOSIVE CONDITIONS

02 OBSERVED (DATE: _____)

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 0

04 NARRATIVE DESCRIPTION

There are no observed or documented threats of fire or explosive conditions.

01 E. DIRECT CONTACT

02 OBSERVED (DATE: _____)

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 0

04 NARRATIVE DESCRIPTION

Site is completely fenced, except for the western side where the Grand Calumet River acts as a natural barrier. There is no hazardous waste stored on site.

01 F. CONTAMINATION OF SOIL

02 OBSERVED (DATE: _____)

POTENTIAL

ALLEGED

03 AREA POTENTIALLY AFFECTED: 14.7

(Acres)

04 NARRATIVE DESCRIPTION

The facility retains a spill prevention plan. The site is diked so that if a spill occurred the material would not leave the site. There is no hazardous waste stored onsite.

01 G. DRINKING WATER CONTAMINATION

02 OBSERVED (DATE: _____)

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 50

04 NARRATIVE DESCRIPTION

Population within a 3 mile radius of the site obtains drinking water from Lake Michigan. The intakes are located at a distance greater than 3 miles from the site. 13 homes have private wells which draw from the shallow aquifer.

01 H. WORKER EXPOSURE/INJURY

02 OBSERVED (DATE: _____)

POTENTIAL

ALLEGED

03 WORKERS POTENTIALLY AFFECTED: 50

04 NARRATIVE DESCRIPTION

There is no hazardous waste stored on site, worker exposure/injury is unlikely.

01 I. POPULATION EXPOSURE/INJURY

02 OBSERVED (DATE: _____)

POTENTIAL

ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 0

04 NARRATIVE DESCRIPTION

There is no hazardous waste stored onsite, exposure/injury to population is unlikely. The site is located in a residential area.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE

02 SITE NUMBER

IL

D98497713

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

There is no hazardous waste present at the site, damage to flora is unlikely.

01 K. DAMAGE TO FAUNA

04 NARRATIVE DESCRIPTION (Include name(s) of species)

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

There is no hazardous waste present at the site, damage to fauna is unlikely. A rabbit was observed onsite.

01 L. CONTAMINATION OF FOOD CHAIN

04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

(See J & K above)

01 M. UNSTABLE CONTAINMENT OF WASTES

(Spills/Funoff/ Standing liquids. Leaking drums)

03 POPULATION POTENTIALLY AFFECTED: 0

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

04 NARRATIVE DESCRIPTION

The site retains a spill prevention plan. Materials stored on the site are not hazardous.

01 N. DAMAGE TO OFFSITE PROPERTY

04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

There is no evidence of any damage to offsite property.

01 O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs

04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

The site has a closed sewer system. All effluent passes through a skimmer tank before entering the Metropolitan Sanitary System.

01 P. ILLEGAL/UNAUTHORIZED DUMPING

04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

There is no evidence of any illegal or unauthorized dumping.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

There are no other known, potential or alleged hazards.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 0

IV. COMMENTS

NONE

V. SOURCES OF INFORMATION (Cite specific references e.g. state files, sample analysis reports)

- Site inspection conducted by EPA (FIT) members on 4/14/86.
- Phone conversation to: Mr. Steven Morello, Calumet City Water Superintendent, Firm: SNC Ryan, Chemical Engineer, EPA (FIT), 6/20/85, (312) 891-8155



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION	
01 STATE IL	02 SITE NUMBER D 98497713

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A. NPDES				
<input type="checkbox"/> B. UIC				
<input type="checkbox"/> C. AIR	Unknown	Unknown	Unknown	Cook County Air Quality
<input type="checkbox"/> D. RCRA				
<input type="checkbox"/> E. RCRA INTERIM STATUS				
<input type="checkbox"/> F. SPCC PLAN	83-0352	Unknown	Unknown	
<input type="checkbox"/> G. STATE (Specify)				
<input type="checkbox"/> H. LOCAL (Specify)				
<input type="checkbox"/> I. OTHER (Specify)				
<input type="checkbox"/> J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT (Check all that apply)	05 OTHER
<input type="checkbox"/> A. SURFACE IMPOUNDMENT			<input type="checkbox"/> A. INCINERATION	<input type="checkbox"/> A. BUILDINGS ON SITE
<input type="checkbox"/> B. PILES			<input type="checkbox"/> B. UNDERGROUND INJECTION	11
<input checked="" type="checkbox"/> C. DRUMS, ABOVE GROUND	Unknown	55 gal.	<input type="checkbox"/> C. CHEMICAL/PHYSICAL	
<input checked="" type="checkbox"/> D. TANK, ABOVE GROUND	34	>50,000 gal	<input type="checkbox"/> D. BIOLOGICAL	
<input checked="" type="checkbox"/> E. TANK, BELOW GROUND	7	250. gal	<input type="checkbox"/> E. WASTE OIL PROCESSING	
<input type="checkbox"/> F. LANDFILL			<input type="checkbox"/> F. SOLVENT RECOVERY	
<input type="checkbox"/> G. LANDFARM			<input type="checkbox"/> G. OTHER RECYCLING/RECOVERY	
<input type="checkbox"/> H. OPEN DUMP			<input type="checkbox"/> H. OTHER NA	
<input type="checkbox"/> I. OTHER (Specify)				

07 COMMENTS The 7, 250 gal. Tanks are not used for storage. They are process flow tanks. Additives are dumped into these tanks and then pumped into blending tanks to be mixed with base stock oil. The above ground tanks and drums are used for the storage of additives, base stock oils and lubricants (The finished product).

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)
<input checked="" type="checkbox"/> A. ADEQUATE, SECURE <input type="checkbox"/> B. MODERATE <input type="checkbox"/> C. INADEQUATE, POOR <input type="checkbox"/> D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.
The drums used to store additives are placed on a cement pad outside until they are either used or sold.
The site has been diked in order to prevent runoff to the Grand Calumet River, if a spill were to occur.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: YES NO

02 COMMENTS

The site is fenced on all sides, except for the western side where the Grand Calumet River acts as a natural barrier.

VI. SOURCES OF INFORMATION (Give specific references, e.g. state files, sample analysis, reports)

Site Inspection conducted by ETE (F17) members on 4/14/86.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
D1 STATE	D2 SITE NUMBER
IL	1398497713

II. DRINKING WATER SUPPLY

D1 TYPE OF DRINKING SUPPLY (check one if applicable)		D2 STATUS			D3 DISTANCE TO SITE		
COMMUNITY	SURFACE	WELL	ENDANGERED	AFFECTED	MONITORED	A.	B.
NON-COMMUNITY	C. <input type="checkbox"/>	D. <input checked="" type="checkbox"/>	A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>	>3	(mi)
			D. <input type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>	2.4	(mi)

III. GROUNDWATER

D1 GROUNDWATER USE IN VICINITY (check one)

- A. ONLY SOURCE FOR DRINKING B. DRINKING
(Other sources available)
COMMERCIAL, INDUSTRIAL, IRRIGATION
(No other water sources available)
- C. COMMERCIAL, INDUSTRIAL, IRRIGATION
(Limited other sources available)
- D. NOT USED, UNUSEABLE

D2 POPULATION SERVED BY GROUND WATER	50	D3 DISTANCE TO NEAREST DRINKING WATER WELL	2.4	(mi)
D4 DEPTH TO GROUNDWATER	15 (ft)	D5 DIRECTION OF GROUNDWATER FLOW	N E	D6 DEPTH TO AQUIFER OF CONCERN

40 (ft)

07 POTENTIAL YIELD OF AQUIFER

Unknown (gpd)

YES NO

D8 DESCRIPTION OF WELLS (including usage, depth, and location relative to population and buildings)

The shallow glacial drift and Silurian dolomite aquifer may be encountered 15 feet below the ground surface. 13 homes draw from this aquifer, and range from 40 feet to 70 feet.

D9 RECHARGE AREA	Regionally.	D11 DISCHARGE AREA	Regionally,
<input checked="" type="checkbox"/> YES	Comments: The shallow aquifers recharge directly by seepage and precipitation.	<input checked="" type="checkbox"/> YES	Comments: groundwater discharges into Lake Michigan.
<input type="checkbox"/> NO		<input type="checkbox"/> NO	

IV. SURFACE WATER

D10 SURFACE WATER USE (check one)

- A. RESERVOIR/RECREATION DRINKING WATER SOURCE B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES C. COMMERCIAL, INDUSTRIAL D. NOT CURRENTLY USED

D12 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Grand Calumet River	<input type="checkbox"/>	100 feet
Lake Michigan	<input type="checkbox"/>	>3 (mi)
Flower Horn Lake	<input type="checkbox"/>	.6 (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

D13 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE A. 509 NO. OF PERSONS	TWO (2) MILES OF SITE B. 6069 NO. OF PERSONS	THREE (3) MILES OF SITE C. 20232 NO. OF PERSONS	D2 DISTANCE TO NEAREST POPULATION 150 ft

D14 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE

D15 DISTANCE TO NEAREST OFF-SITE BUILDING

1597

150 ft

D16 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The site is located in a residential area, the Grand Calumet River borders the west side of the site.



**POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA**

I. IDENTIFICATION01 STATE **IL** 02 SITE NUMBER **D 9849 7713****VI. ENVIRONMENTAL INFORMATION**

D1 PERMEABILITY OF UNSATURATED ZONE (Check one)

A. $10^{-8} - 10^{-6}$ cm/sec B. $10^{-4} - 10^{-3}$ cm/sec C. $10^{-4} - 10^{-3}$ cm/sec D. GREATER THAN 10^{-3} cm/sec

D2 PERMEABILITY OF BEDROCK (Check one)

A. IMPERMEABLE (Less than 10^{-6} cm/sec) B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-3}$ cm/sec) C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-1}$ cm/sec) D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

D3 DEPTH TO BEDROCK

D4 DEPTH OF CONTAMINATED SOIL ZONE

D5 SOIL pH

35 (ft)Unknown (m)6.1 to 7.3

D6 NET PRECIPITATION

D7 ONE YEAR 24 HOUR RAINFALL

D8 SLOPE SITE SLOPE

DIRECTION OF SITE SLOPE

TERRAIN AVERAGE SLOPE

3.75 (in)2.43 (in)0 %west0 %

D9 FLOOD POTENTIAL

10NA SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

D10 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE

OTHER

D11 DISTANCE TO CRITICAL HABITAT (of endangered species)

A. > 3 (mi)B. .2 (mi)NA> 3 (mi)

ENDANGERED SPECIES:

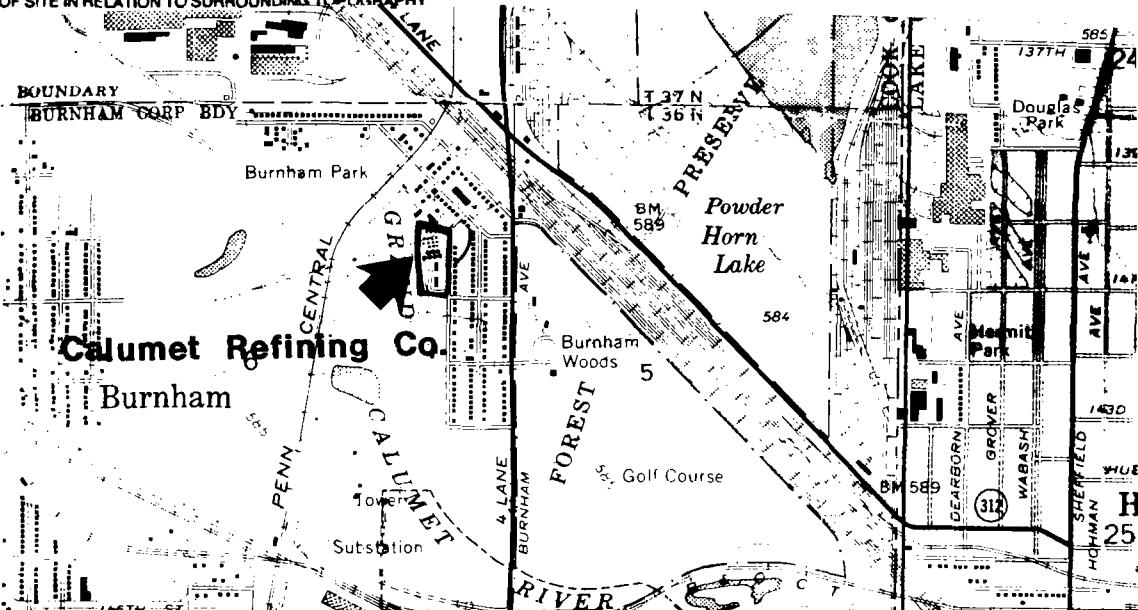
D12 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL

RESIDENTIAL AREAS, NATIONAL/STATE PARKS,
FORESTS, OR WILDLIFE RESERVESAGRICULTURAL LANDS
PRIME AG LAND AG LANDA. .6 (mi)B. 150 ft. (ft)C. > 3 (mi) D. > 3 (mi)

D13 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY



VII. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)

- Inspection conducted by E&E (FIT) numbers on 4/14/86.
- U.S.G.S. Topographic Map 7.5' Lake Calumet Quad, 1963 PR 1975.
- U.S. Fish and Wildlife, Dept. of the Interior.
- Climatic atlas of the U.S., U.S. Dept. of Commerce, 1979.
- Soil Survey of DuPage and Part of Cook Counties, U.S. Dept. of Ag. 5/79.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION
01 STATE IL
02 SITE NUMBER 898797713

II. SAMPLES TAKEN No samples were taken

SAMPLE TYPE	D1 NUMBER OF SAMPLES TAKEN	D2 SAMPLES SENT TO	D3 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

D1 TYPE	D2 COMMENTS
NONC	

IV. PHOTOGRAPHS AND MAPS

D1 TYPE <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> AERIAL	D2 IN CUSTODY OF Ecology and Environment, Inc. <small>(Name of organization or individual)</small>
D3 MAPS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	D4 LOCATION OF MAPS Ecology and Environment, Inc. (FIT Files)

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Noise

VI. SOURCES OF INFORMATION (Cite specific references e.g., state files, sample analysis, reports)

- Site inspection conducted by E&E (FIT) members on 4/14/86.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER
IL | D 98497713

II. CURRENT OWNER(S)

01 NAME <i>Calumet Refining Co.</i>	02 D+B NUMBER	03 NAME <i>Calumet Industries</i>	04 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) <i>1450 Mackinaw Ave.</i>	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY <i>Chicago</i>	06 STATE IL	07 ZIP CODE 60633	12 CITY <i>Shreveport</i>
13 STATE La	14 ZIP CODE		
01 NAME	02 D+B NUMBER	03 NAME	04 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY	06 STATE IL	07 ZIP CODE	12 CITY
13 STATE La	14 ZIP CODE		
01 NAME	02 D+B NUMBER	03 NAME	04 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY	06 STATE IL	07 ZIP CODE	12 CITY
13 STATE La	14 ZIP CODE		
01 NAME	02 D+B NUMBER	03 NAME	04 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY	06 STATE IL	07 ZIP CODE	12 CITY
13 STATE La	14 ZIP CODE		

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME <i>Calumet Refining Co.</i>	02 D+B NUMBER	01 NAME <i>None</i>	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) <i>1400 Mackinaw Ave.</i>	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY <i>Chicago</i>	06 STATE IL	07 ZIP CODE 60633	05 CITY
06 STATE	07 ZIP CODE		
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE IL	07 ZIP CODE	05 CITY
06 STATE	07 ZIP CODE		
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE IL	07 ZIP CODE	05 CITY
06 STATE	07 ZIP CODE		

V. SOURCES OF INFORMATION (Check specific references, e.g., state files, sample analysis, reports)

Site Inspection Conducted by E&E (F&T) members on 4/14/86



**POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART B - OPERATOR INFORMATION**

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D 984 97713

II. CURRENT OPERATOR (Provide if different from owner)			OPERATOR'S PARENT COMPANY (if applicable)		
D1 NAME <i>Exxon</i>		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	14 CITY	15 STATE
D8 YEARS OF OPERATION	09 NAME OF OWNER				
III. PREVIOUS OPERATOR(S) (list most recent first; provide only if different from owner)			PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)		
D1 NAME <i>AIA</i>		02 D+B NUMBER	10 NAME <i>NA</i>		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	14 CITY	15 STATE
D8 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
D1 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	14 CITY	15 STATE
D8 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
D1 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	14 CITY	15 STATE
D8 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
IV. SOURCES OF INFORMATION (check all that apply)					

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis reports)

Site Inspection conducted by E&E (FIT) members on 4/14/82



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART B - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE IL	02 SITE NUMBER D9849713

II. ON-SITE GENERATOR

01 NAME <i>NA</i>	02 D+B NUMBER			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE			
05 CITY	06 STATE	07 ZIP CODE		

III. OFF-SITE GENERATOR(S)

01 NAME <i>NA</i>	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY
06 STATE	07 ZIP CODE	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY
06 STATE	07 ZIP CODE	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME <i>NA</i>	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY
06 STATE	07 ZIP CODE	06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY
06 STATE	07 ZIP CODE	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Give specific references, e.g., state files, sample analysis, reports)

Site Inspection conducted by E&E (FIT) members in 4/14/86.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

L IDENTIFICATION
01 STATE IL 02 SITE NUMBER 098-197713

II. PAST RESPONSE ACTIVITIES

01 <input type="checkbox"/> A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> H. ON SITE BURIAL 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> L. ENCAPSULATION 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> N. CUTOFF WALLS 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE	03 AGENCY
NA		
01 <input type="checkbox"/> Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE	03 AGENCY
NA		



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	098497713

II. PAST RESPONSE ACTIVITIES (Continued)

01 R. BARRIER WALLS CONSTRUCTED
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 S. CAPPING/COVERING
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 T. BULK TANKAGE REPAIRED
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 U. GROUT CURTAIN CONSTRUCTED
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 V. BOTTOM SEALED
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 W. GAS CONTROL
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 X. FIRE CONTROL
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 Y. LEACHATE TREATMENT
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 Z. AREA EVACUATED
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 1. ACCESS TO SITE RESTRICTED
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 2. POPULATION RELOCATED
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

01 3. OTHER REMEDIAL ACTIVITIES
04 DESCRIPTION

NA

02 DATE _____ 03 AGENCY _____

III. SOURCES OF INFORMATION (One specific references, e.g., state files, sample analysis, reports)

Site inspection conducted by E&E (FIT) members on 4/14/86.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
O1 STATE	O2 SITE NUMBER
IL	198497713

II. ENFORCEMENT INFORMATION

O1 PAST REGULATORY/ENFORCEMENT ACTION YES NO

O2 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

None

II. SOURCES OF INFORMATION (Cite specific references e.g., state files, sample analysis, reports)

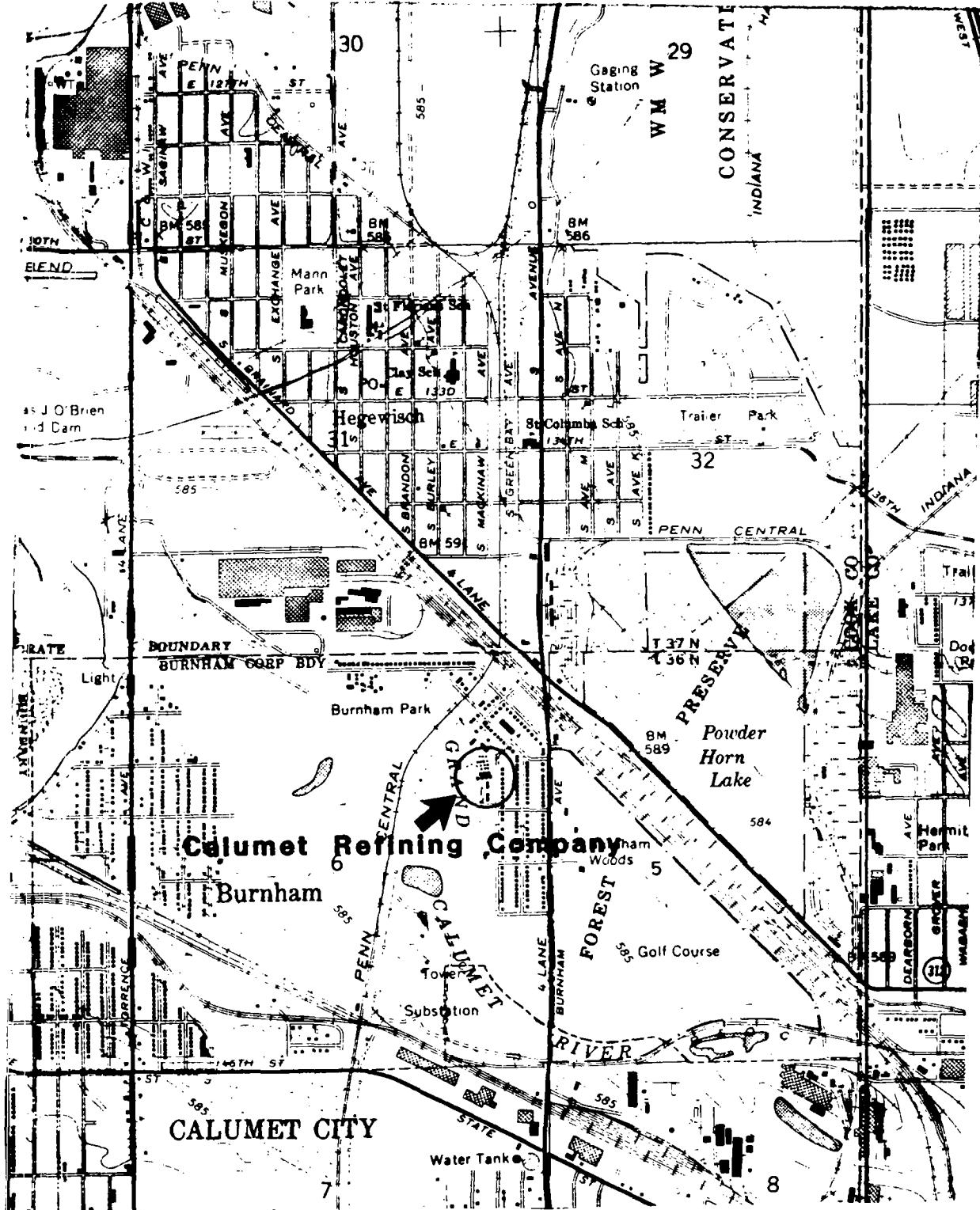
- Site Inspection conducted by EPA (FIR) members in 4/14/86.

Immediate Removal Action Check Sheet

	High	Moderate	Low
<u>Fire and Explosion Hazard</u>			
Flammable Materials	None		
Explosives	None		
Incompatable Chemicals	None		
<u>Direct Contact with Acutely Toxic Chemicals</u>			
Site Security	Site is fenced		
Leaking Drums or Tanks	NA		
Open Lagoons or pits	NA		
Materials on Surface	NA		
Proximity of Population	200 feet		
Evidence of Casual Site Use	None		
<u>Contaminated Water Supply</u>			
Exceeds 10 Day Snarl	NA		
Gross Taste or Odors	None		
Alternate Water Available	NA		
Potential Contamination	NA		
Is the site abandoned or <u>active?</u>			

Comments

Materials inside are not considered to be hazardous.



ecology and environment, Inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

SCALE: 1:24000

APPROVED BY:

DRAWN BY U.S.G.S.

DATE: 1965

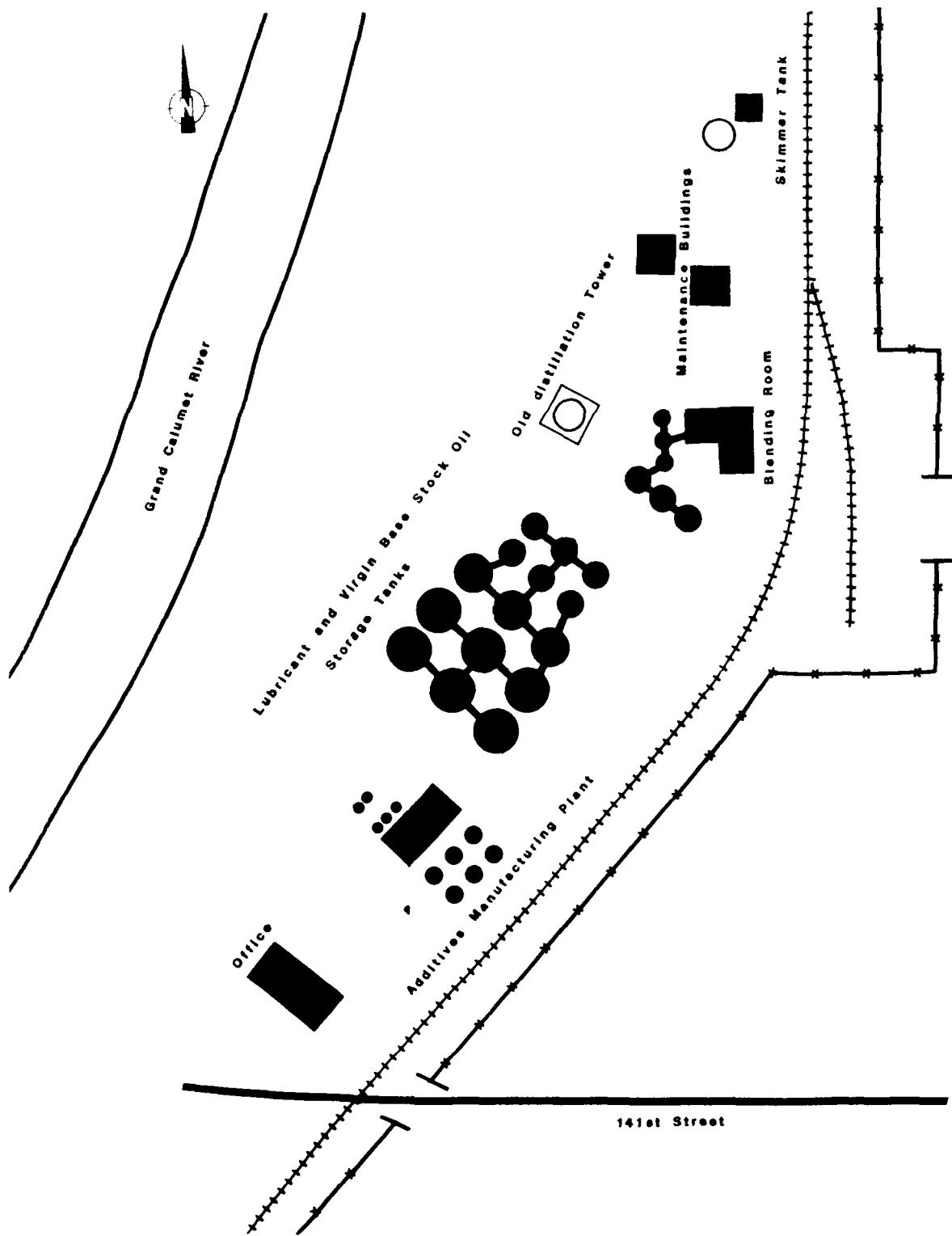
REVISED 1973

Calumet Refining Company

Quadrangle: Lake Calumet, IL-IN

DRAWING NUMBER

1



ecology and environment, Inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

SCALE: NA

DATE: 5/28/86

DRAWN BY RAJ

REVISED NA

Calumet Refining Company

Site Map

DRAWING NUMBER

2

FIELD PHOTOGRAPHY LOG SHEET

Page 1 of 3

DATE 5/14/86TIME 10:42 A.M. P.M.DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNWWEATHER Cold, Cloudy,
50° FSITE Calumet Refining Co.TDD# R05 8603-19

PHOTOGRAPHED BY:

Cindy PughSAMPLE ID# (if applicable)
NADESCRIPTION: Drums in the foreground are additives, the drums
in the background are new clean drums.DATE 5/14/86TIME 10:44 A.M. P.M.DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNWWEATHER Cold, Cloudy,
50° FSITE Calumet Refining Co.TDD# R05 8603-19

PHOTOGRAPHED BY:

Cindy PughSAMPLE ID# (if applicable)
NADESCRIPTION: Tank area where lubricating oils
and base stocks are stored.

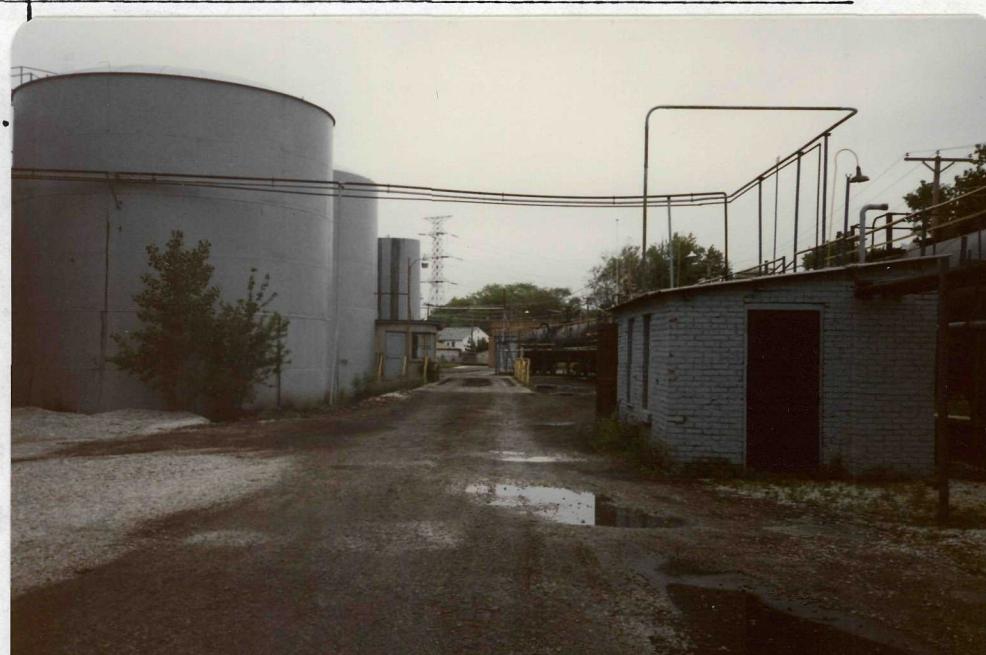
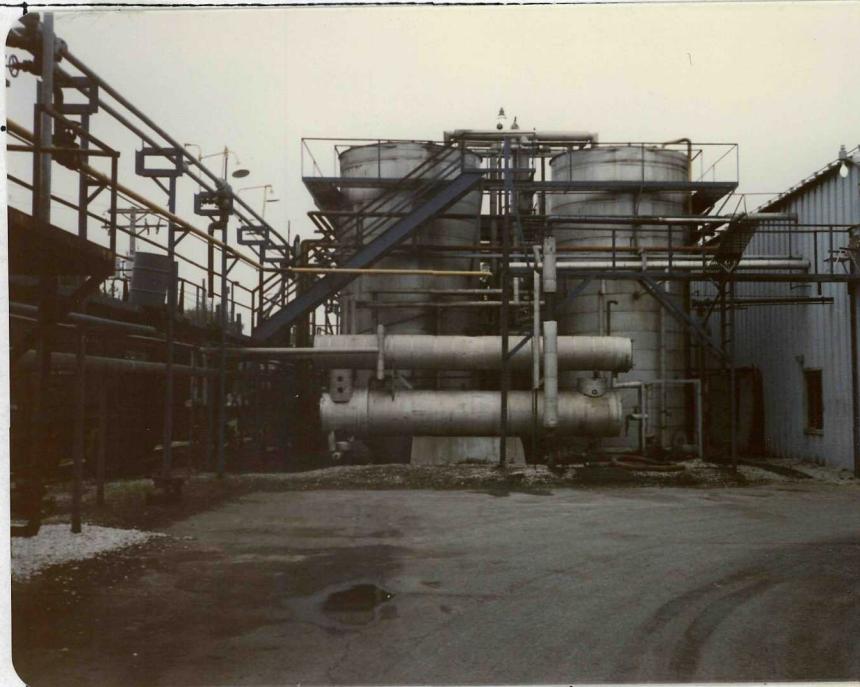
FIELD PHOTOGRAPHY LOG SHEET

Page 2 of 3DATE 5/14/86TIME 1045 A.M. P.M.DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNWWEATHER Cold, cloudy,
50° FSITE Calumet Refining Co.TDD# R05-8603-19

PHOTOGRAPHED BY:

Cindy PushSAMPLE ID# (if applicable)
NADESCRIPTION: Additives which are manufactured onsite,
are loaded onto traincars and shipped to buyers.DATE 5/14/86TIME 1045 A.M. P.M.DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNWWEATHER Cold, cloudy,
50° FSITE Calumet Refining Co.TDD# R05-8603-19

PHOTOGRAPHED BY:

Cindy PushSAMPLE ID# (if applicable)
NADESCRIPTION: Base stock oils from Louisiana are
unloaded from train cars and stored in the tanks
until they are used.

FIELD PHOTOGRAPHY LOG SHEET

Page 3 of 3DATE 5/14/86TIME 1048

(A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

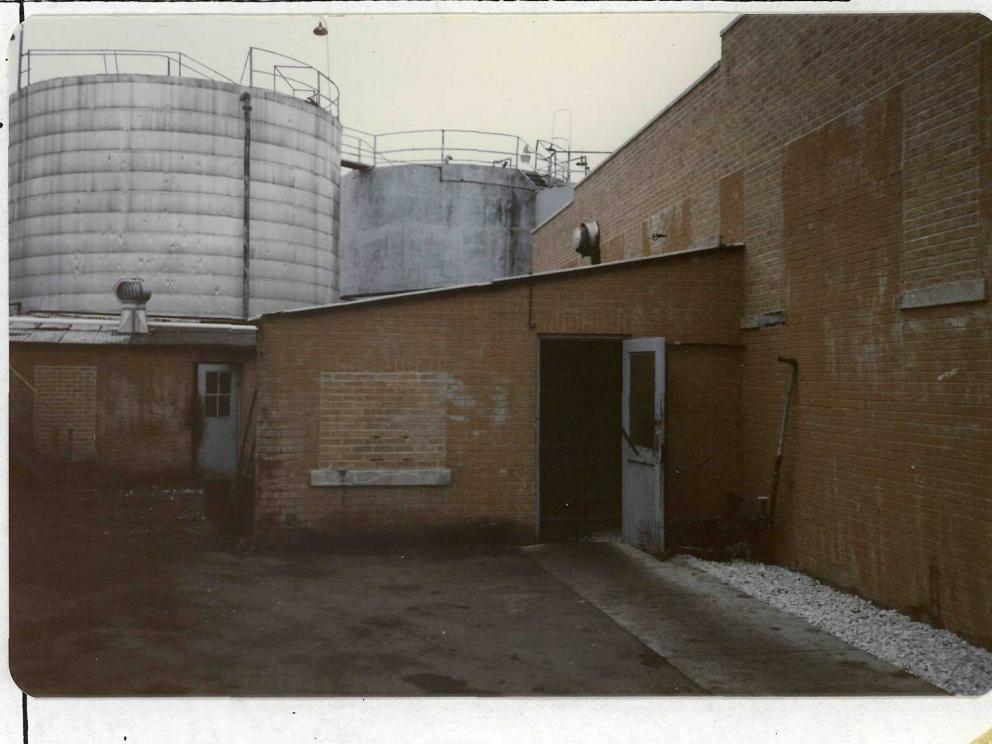
WEATHER Cold, Cloudy,
50° F

SITE Calumet Refining Co.TDD# R05 8603-19

PHOTOGRAPHED BY:

Cindy Pugh

SAMPLE ID# (if applicable)
NA



DESCRIPTION: Blending Room. Additives are blended with base stock oils to produce lubricating oils.

DATE 5/14/86TIME 1050

(A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER Cold Cloudy,
50° F

SITE Calumet Refining Co.TDD# R05-8603-19

PHOTOGRAPHED BY:

Cindy Pugh

SAMPLE ID# (if applicable)
NA



DESCRIPTION: Train tracks were Base stock oils arrive on.
Additives are stored in drums on the cement area.